## **EUROPEAN PATENT OFFICE**

## Patent Abstracts of Japan

**PUBLICATION NUMBER** 

10125959

**PUBLICATION DATE** 

15-05-98

APPLICATION DATE

22-10-96

APPLICATION NUMBER

08279594

APPLICANT: SHARP CORP;

INVENTOR:

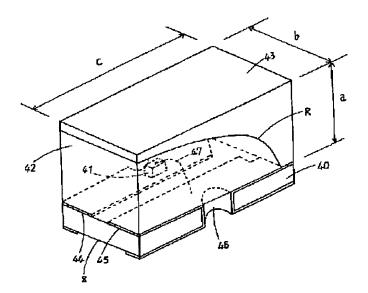
OKAZAKI ATSUSHI;

INT.CL.

H01L 33/00

TITLE

: SIDE-EMISSION CHIP LED



ABSTRACT :

PROBLEM TO BE SOLVED: To provide a side-emission chip LED which is wide in a horizontal effective irradiation region and high in brightness.

SOLUTION: A light emitting element 41 mounted on a base 40 is sealed up in a light transmitting body 42, and a reflector 43 which reflects light emitted from the elements 41 is provided covering a part of the surface of the light transmitting body 42. The reflector 43 is possessed of a reflecting surface R whose surface is curved like a part of a parabola, and the light emitting element 41 is disposed off the center line of the parabola in a vertical direction, and then irradiation light is diffused in a horizontal direction but constricted in a vertical direction so as to become high in directivity, where the half-value angle of the irradiation light in a horizontal direction is larger than that in a horizontal direction.

COPYRIGHT: (C)1998,JPO